



Metro Nashville
DISTRICT ENERGY SYSTEM

DES Customer Meeting

Spring FY14

May 22, 2014

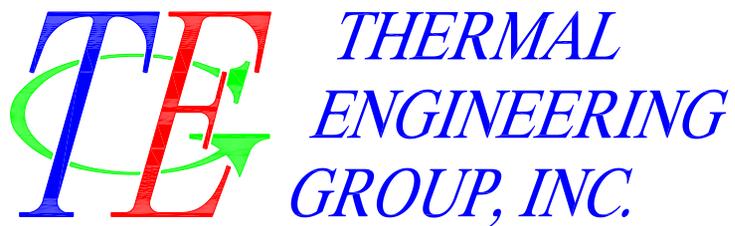


Agenda

1. Welcome!
2. Historic Customer Expenses
3. Historic Cost Consumption
4. Historic System Efficiency
5. Natural Gas Pricing
6. DES FY15 Budget
7. Capital Projects Review & How They Affect You
8. Annual DES Shutdowns
9. 10th Anniversary Recognition
10. Questions and Answers
11. Adjourn



1. Welcome DES Customers!



2. Historic Customer Expenses

- ❖ Figure 2A. Historic CHW Expenses
- ❖ Figure 2B. Historic Steam Expenses
- ❖ Table 2. Rolling Twelve Month Expenses

Figure 2A. Historic CHW Expenses

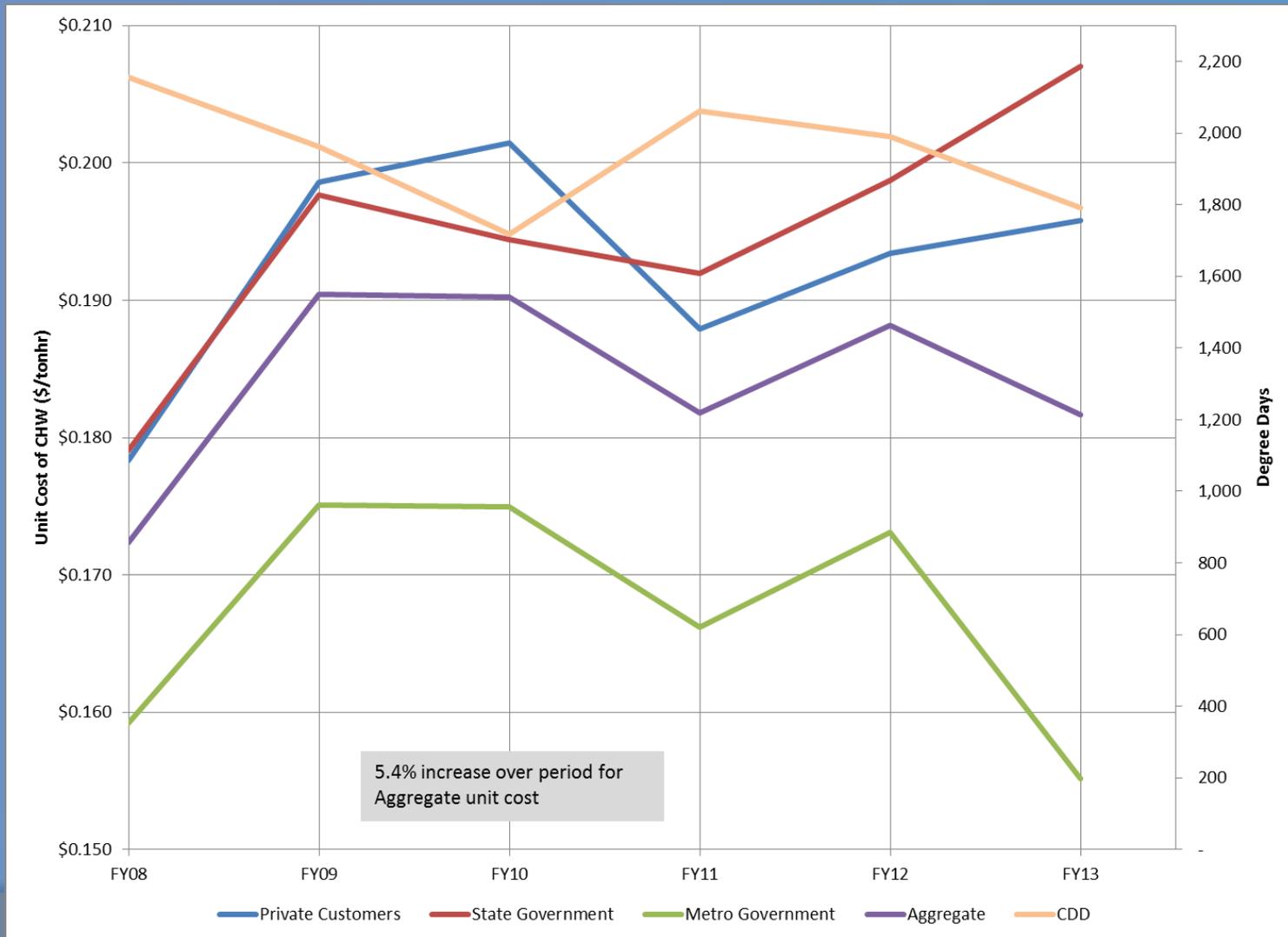


Figure 2B. Historic Steam Expenses

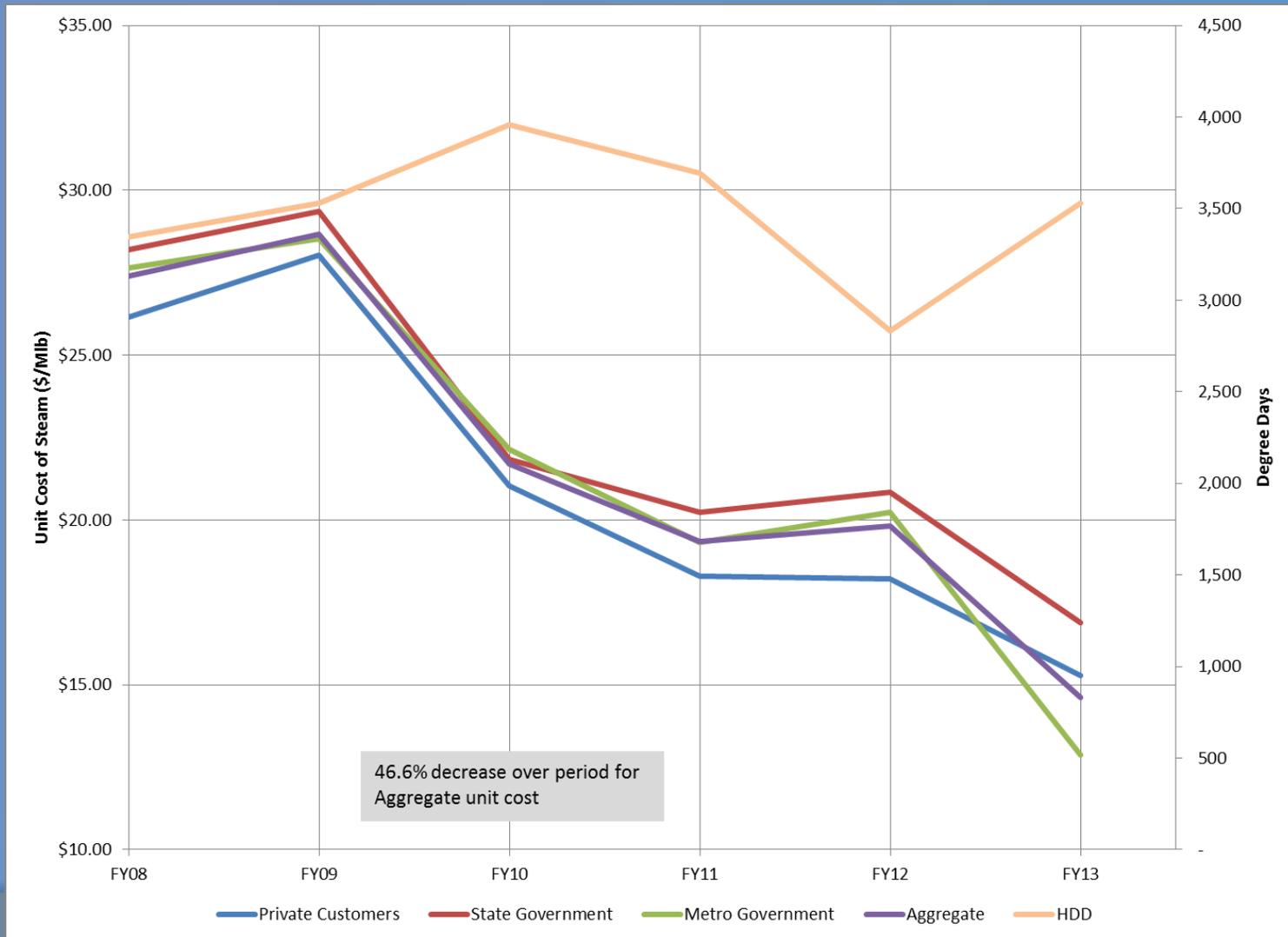


Table 2. Rolling Twelve Month Expenses

		Steam - Rolling 12 Month			Chilled Water - Rolling 12 Month		
		Apr 2012 - Mar 2013	Apr 2013 - Mar 2014	% Diff.	Apr 2012 - Mar 2013	Apr 2013 - Mar 2014	% Diff.
Private	Cost	\$ 1,337,722	\$ 1,483,949	10.93%	\$ 3,391,795	\$ 3,280,829	-3.27%
	Usage (lbs or tonhrs)	84,520,591	92,899,687	9.91%	17,516,818	17,085,057	-2.46%
	Unit Cost	\$ 15.83	\$ 15.97	0.9%	\$ 0.194	\$ 0.192	-0.8%
State	Cost	\$ 1,836,030	\$ 2,114,416	15.16%	\$ 3,414,727	\$ 3,280,775	-3.92%
	Usage (lbs or tonhrs)	105,502,775	121,369,414	15.04%	16,630,973	15,422,519	-7.27%
	Unit Cost	\$ 17.40	\$ 17.42	0.1%	\$ 0.205	\$ 0.213	3.6%
Metro	Cost	\$ 2,034,136	\$ 2,797,364	37.52%	\$ 4,199,276	\$ 5,277,441	25.68%
	Usage (lbs or tonhrs)	152,601,345	198,953,156	30.37%	25,442,007	29,794,610	17.11%
	Unit Cost	\$ 13.33	\$ 14.06	5.5%	\$ 0.165	\$ 0.177	7.3%
Aggregate	Cost	\$ 5,207,888	\$ 6,469,935	24.23%	\$ 11,005,798	\$ 11,904,063	8.16%
	Usage (lbs or tonhrs)	342,624,711	416,787,726	21.65%	59,589,798	62,631,564	5.10%
	Unit Cost	\$ 15.20	\$ 15.52	2.1%	\$ 0.185	\$ 0.190	2.91%

MFA not included in values shown

3. Historic Customer Consumption

- ❖ Figure 3A. Historic CHW Consumptions
- ❖ Figure 3B. Historic Steam Consumptions

Figure 3A. Historic CHW Consumptions

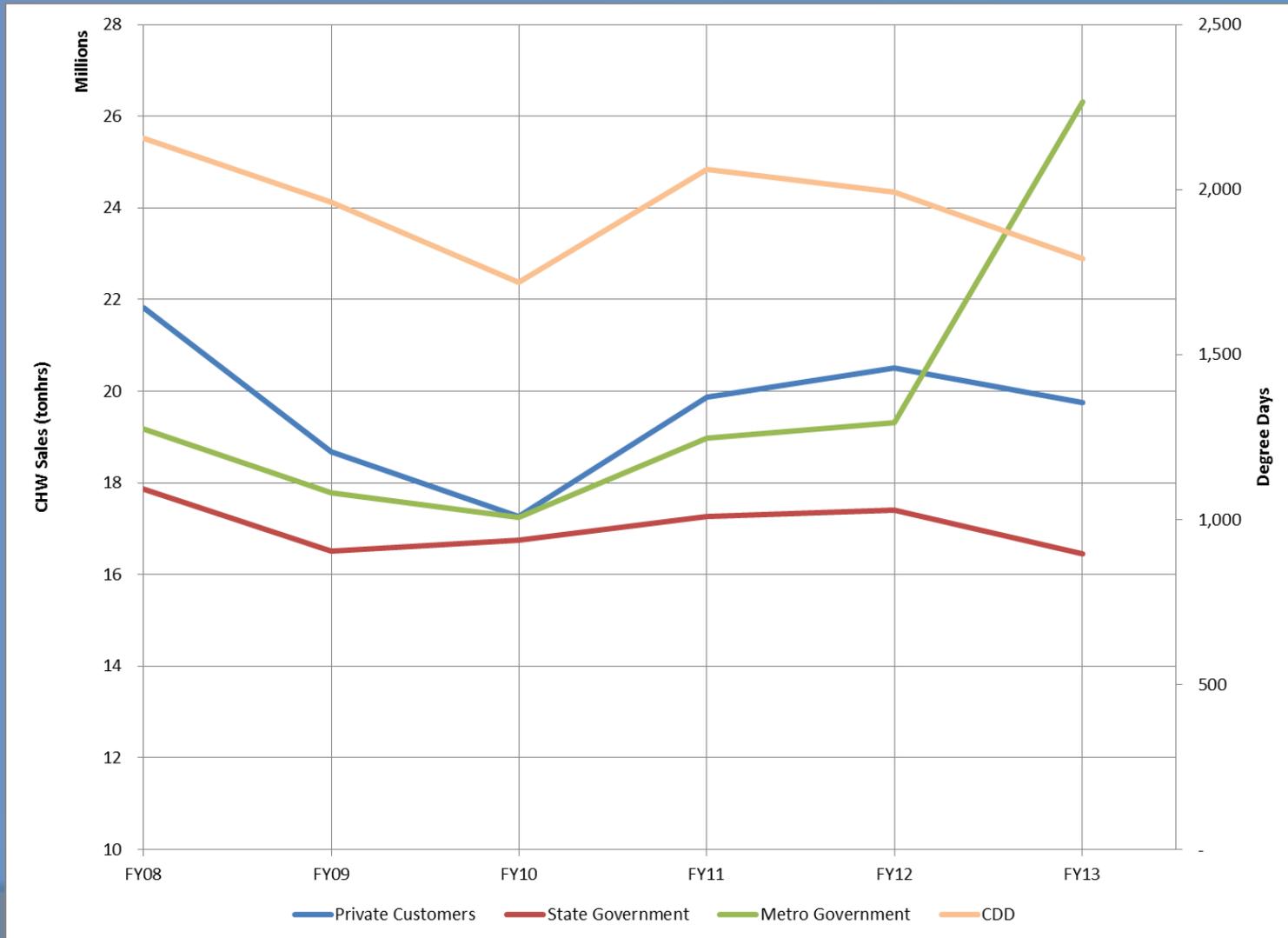
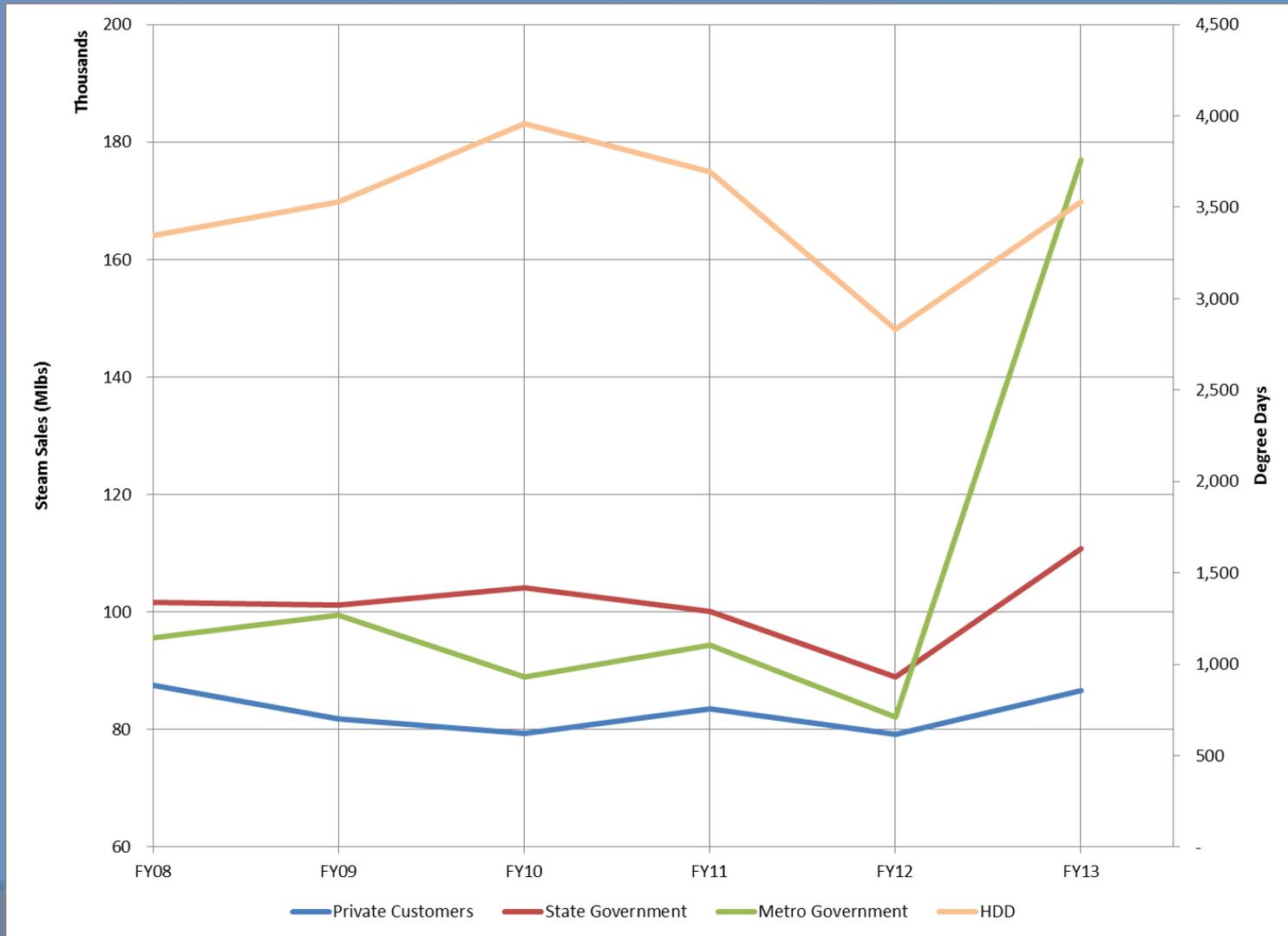


Figure 3B. Historic Steam Consumptions



4. *Historic System Efficiency*

- ❖ Figure 4A. Historic CHW Water Usages
- ❖ Figure 4B. Historic CHW Electric Efficiency
- ❖ Figure 4C. Historic Steam Fuel and Electric Efficiencies
- ❖ Figure 4D. Historic Steam Water Usage and Condensate Return

Figure 4A. Historic CHW Water Usages

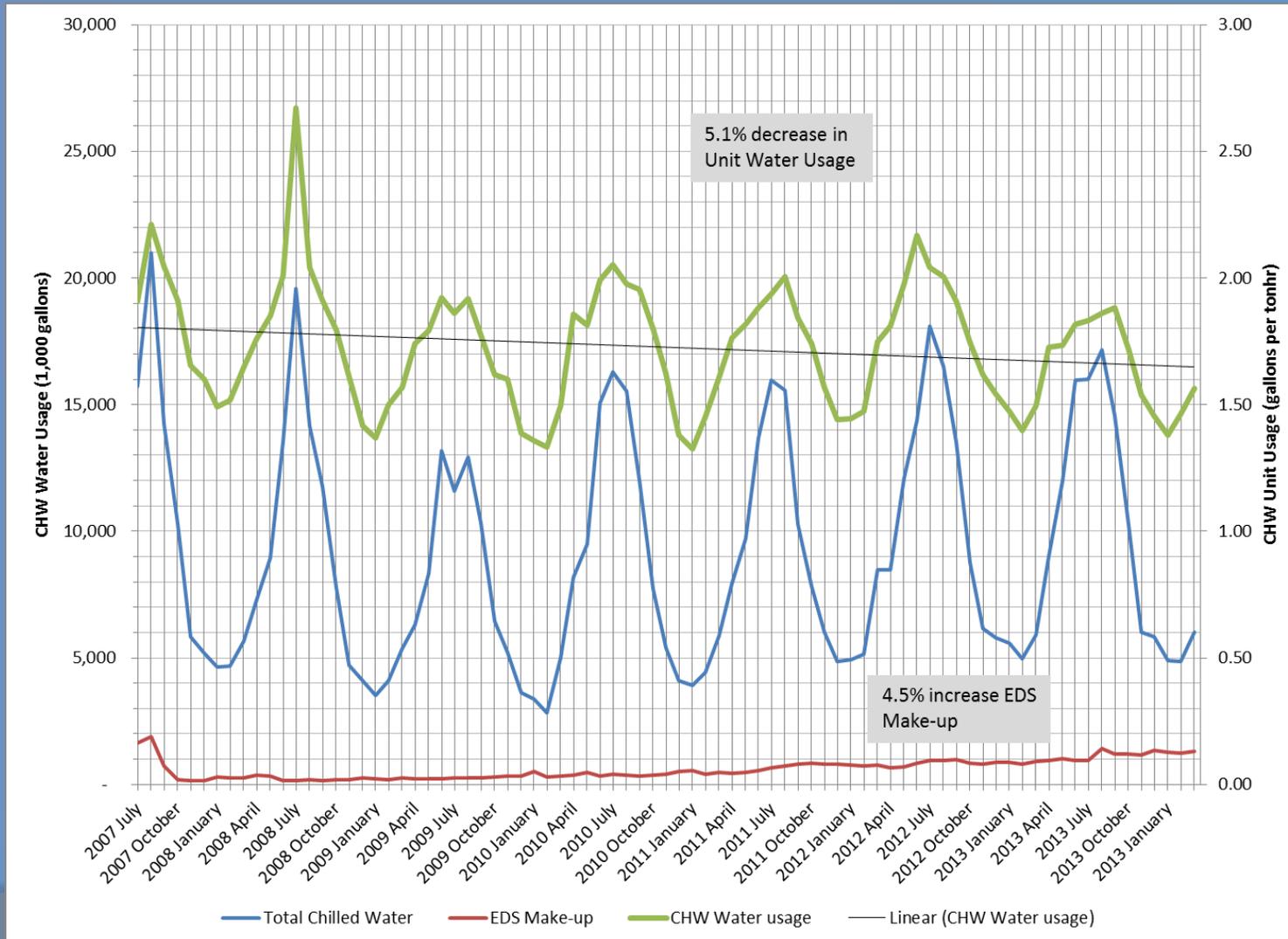


Figure 4B. Historic CHW Electric Efficiency

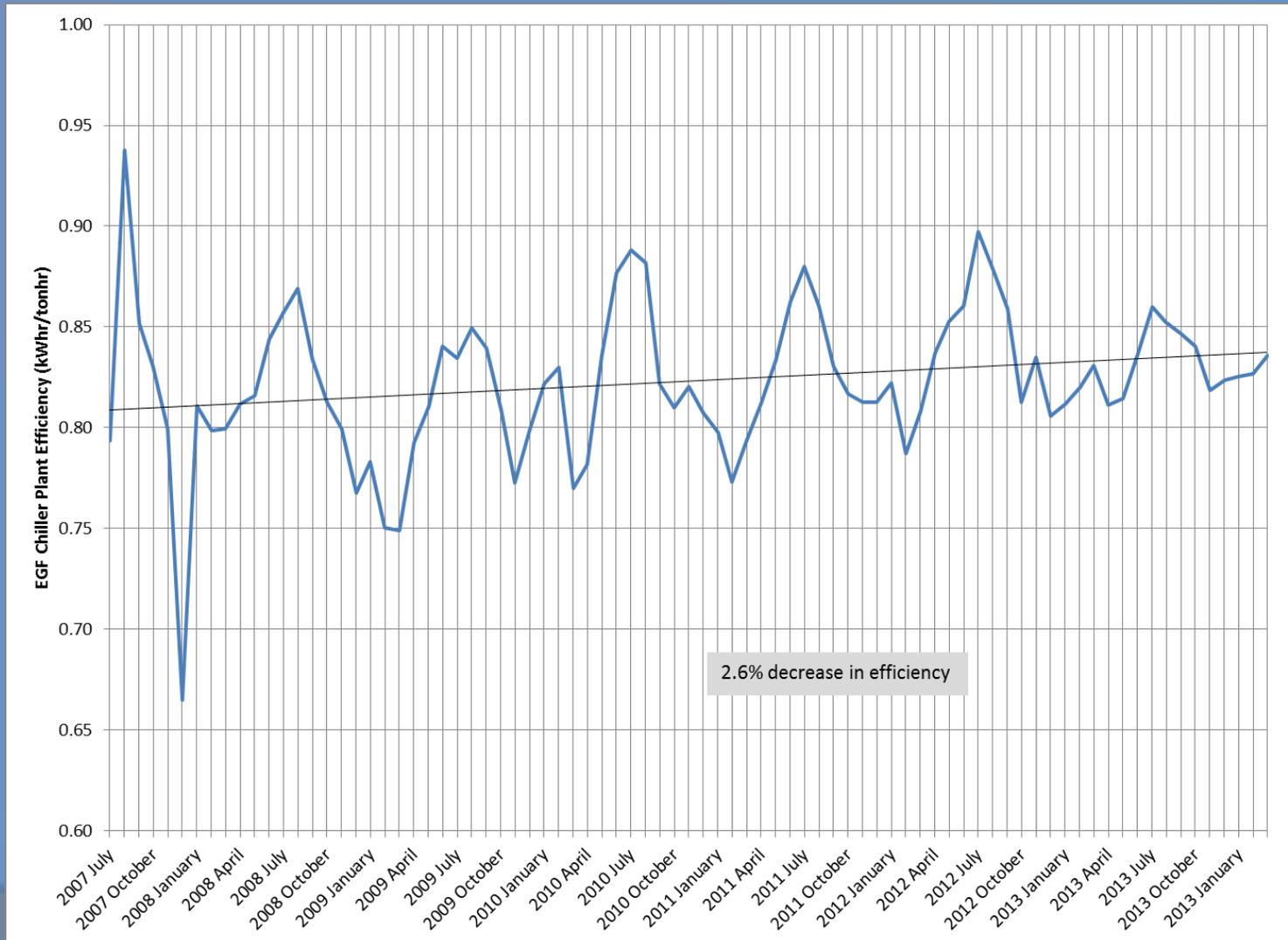


Figure 4C. Historic Steam Fuel and Electric

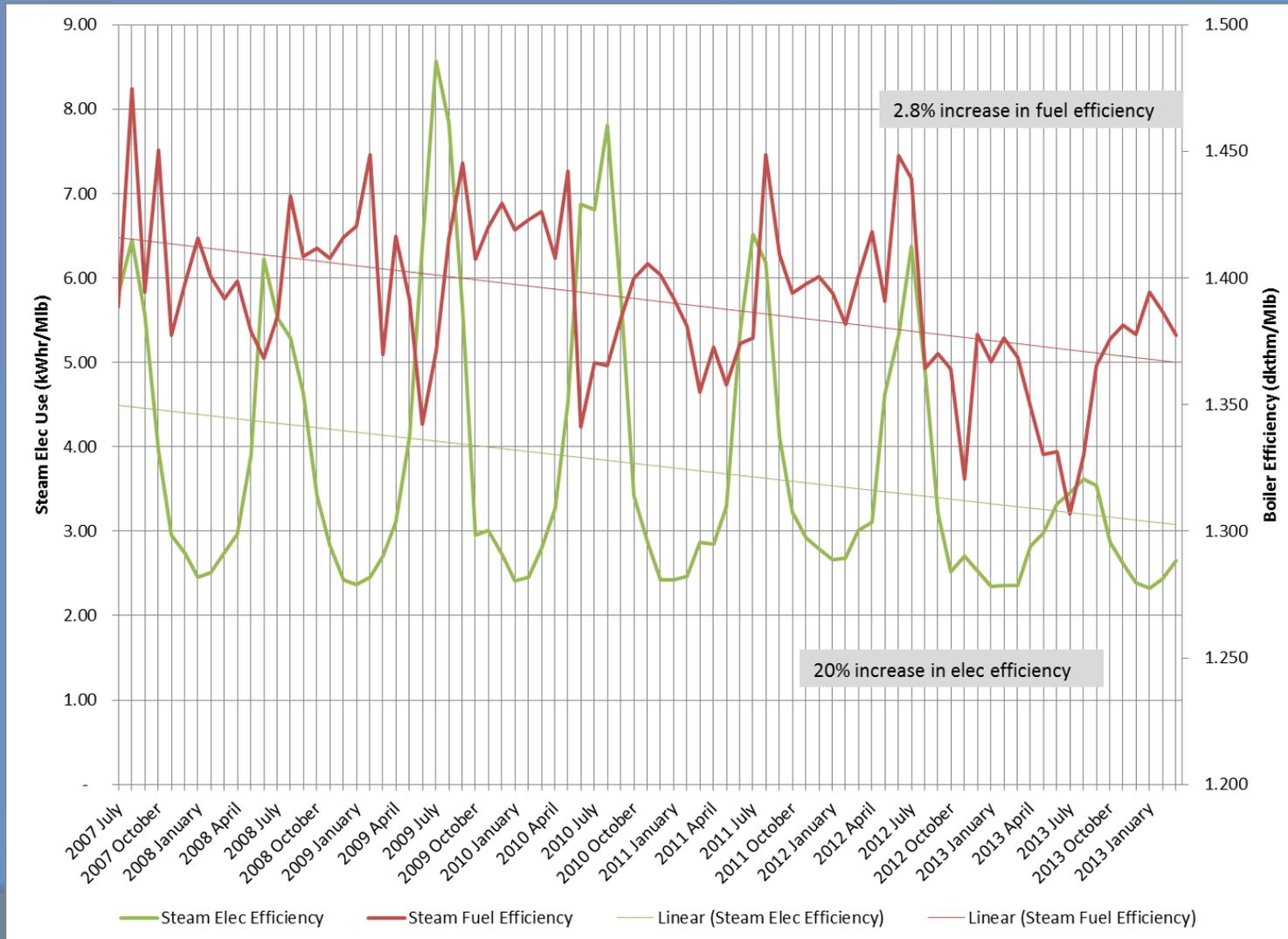
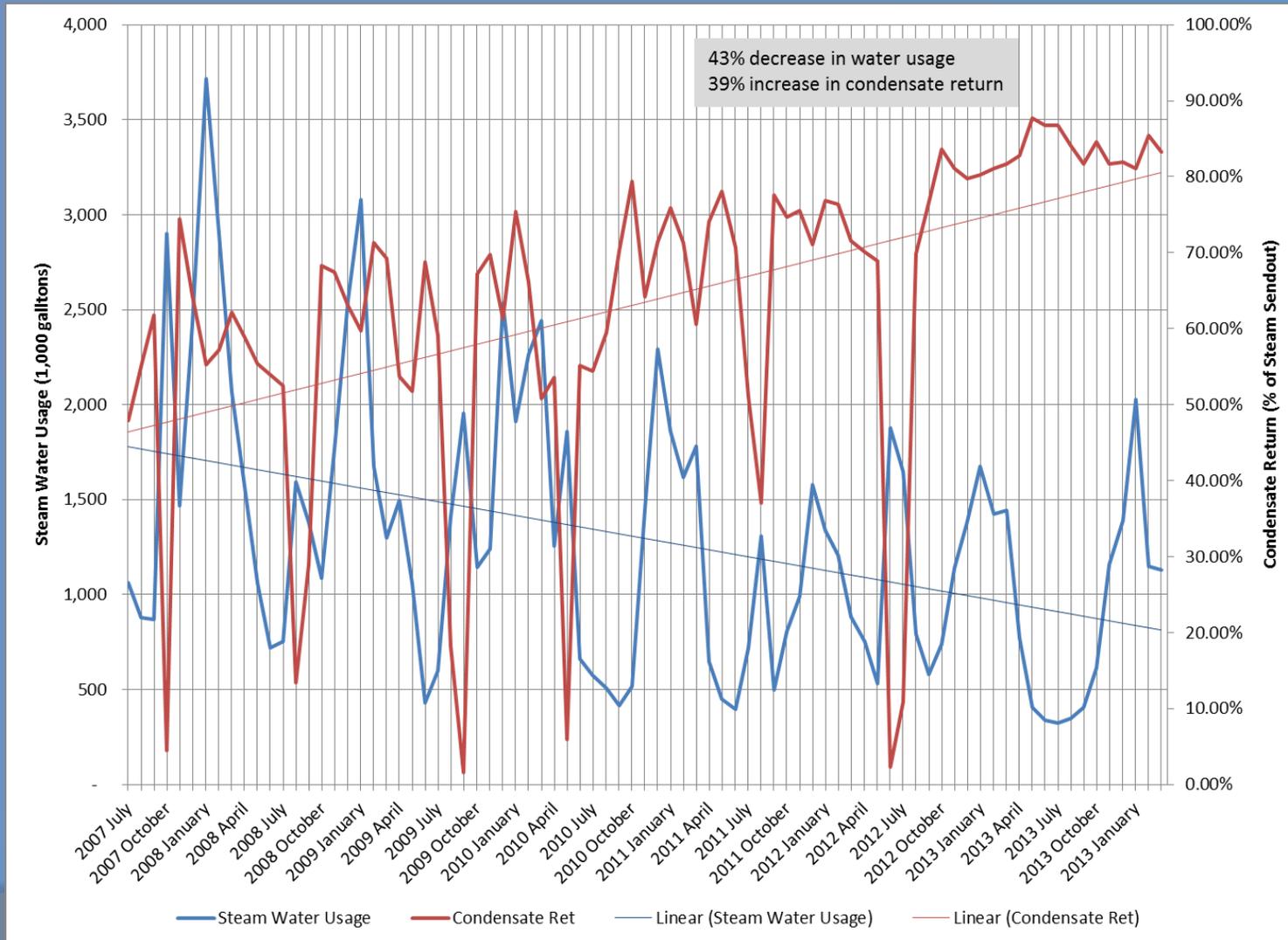
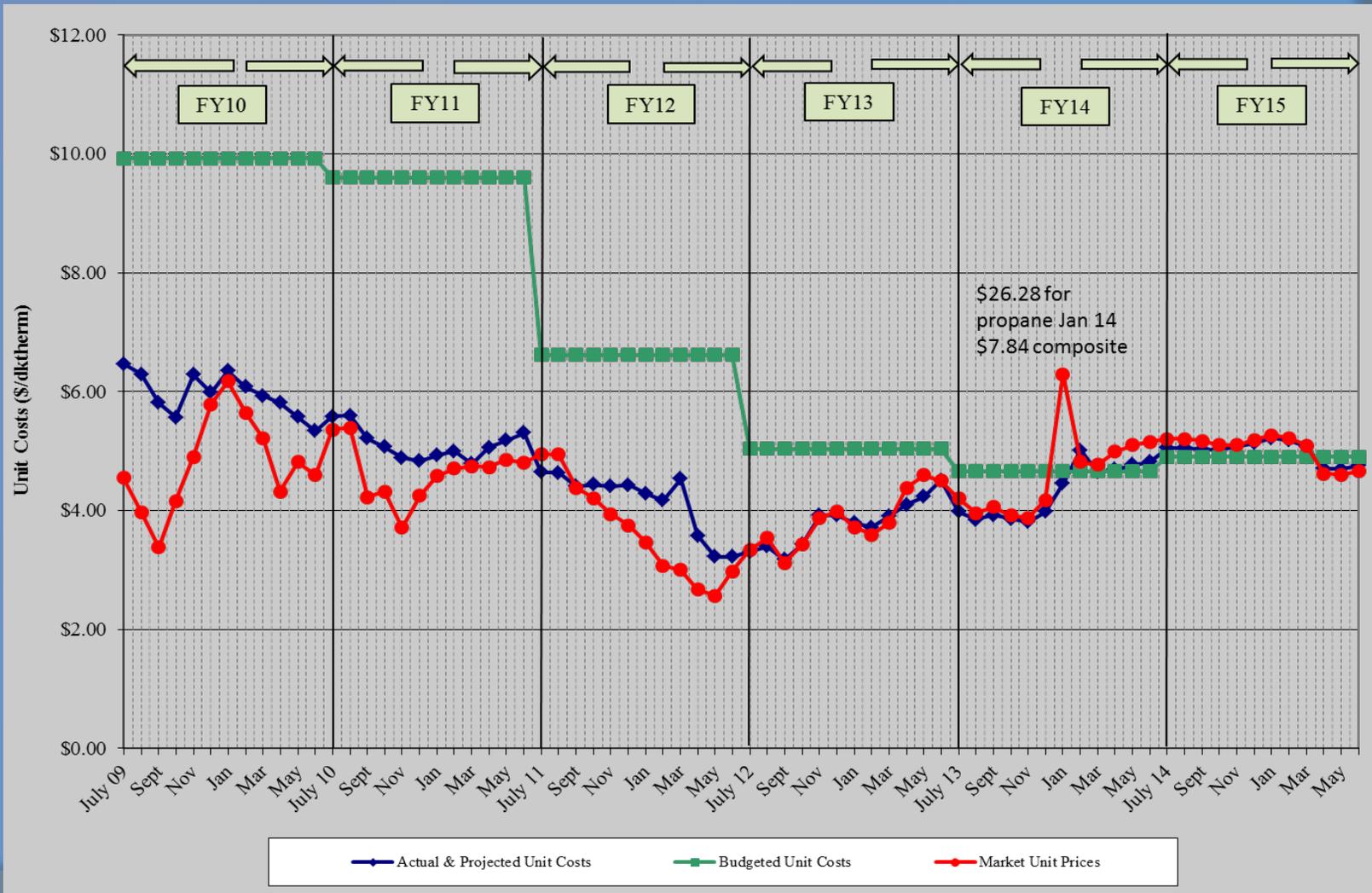


Figure 4D. Historic Steam Water Usage and



5. Natural Gas Pricing



6. DES FY15 Budget

Item	FY14 Budget	FY15 Budget	Percent Change
FOC's	\$ 4,583,500	\$ 4,606,780	0.51%
Pass Throughs			
Non-Energy	\$ 1,184,600	\$ 1,088,930	-8.08%
Water/Sewer	\$ 714,300	\$ 724,580	1.44%
Natural Gas Base	\$ 2,515,126	\$ 3,121,812	24.12%
Natural Gas Contingency	\$ 640,974	\$ 635,368	-0.87%
Electricity	\$ 6,585,000	\$ 6,577,730	-0.11%
Debt Service	\$ 5,618,500	\$ 5,645,900	0.49%
Total Expenses	\$ 21,842,000	\$ 22,401,100	2.56%
Total Revenues	\$ 19,883,700	\$ 20,501,500	3.11%
Metro Funding Amount	\$ 1,958,300	\$ 1,899,600	-3.00%

7. Capital Projects and How They Affect You!

- ❖ Table 7. Capital Expenditures to Date
- ❖ Capital Projects Review: Active Projects
- ❖ Capital Projects Review: Closed Projects

Table 7. Capital Expenditures to Date

	Spent to End of FY13	FY14 Spending	Balance to Date (04/18/14)
R&I Projects	\$2,181,091	\$104,869	\$148,623
49109-2010 Bond	\$1,888,400	\$2,857	\$518,743
49107-Customer Connection Fund	\$5,825,733	\$688,165	\$1,986,102
Total	\$9,895,224	\$795,891	\$2,653,468

Previous Bonds with \$0 Remaining: 2002A, 2005B, 2007 and 2008



Capital Projects Review

Active Capital Projects

- DES 091: TOU and Thermal Storage – developing TOU customer rates



Capital Projects Review

Capital Projects in Close-out

- DES 061: MH & Tunnel Steel Corrosion Repair & Prevention – completed
- DES 080: Misc. MH & Tunnel Safety Repairs – completed
- DES 090: Manhole & Tunnel Insulation – completed
- DES 094: Molloy Street Exploratory Dig – completed
- DES 095: MH B2 Water Infiltration Remediation – completed
- DES 098: Service Connection to Nashville Hyatt Place – completed
- DES 099: 2012 Steam Shut-down (MH-B Valve Removal) – completed
- DES 100: MH-10 Sump Pump – completed
- DES 101: MH-1 Abandonment – completed
- DES 103: Sheraton CHW Service Modifications - completed



8. *Annual DES Shutdowns*

- ❖ Steam Shutdown – Last Monday in June
 - ❖ No System-wide Steam Shut-down This Year
- ❖ CHW Shutdown – Third Monday in December
 - ❖ CHW Shutdown Anticipated in December 2014
- ❖ Any Comments or Discussion?

9. *DES Tenth Anniversary*

- ❖ 2.89 Billion lbs of steam sales avoiding 667,300 tons of CO₂
- ❖ 523 Million tonhrs of CHW sales avoiding 106,850 tons of CO₂
- ❖ EDS approximately 4.5 miles of distribution serving 41 district customer buildings
- ❖ CNE has operated with over 99% reliability
- ❖ CNE has operated 1,034 days without injury or OSHA recordable accident and Zero Lost Time Accidents
- ❖ CNE has operated 2,955 days without an environmental incident or release and Zero environmental Notices of Violation or fines
- ❖ DES Customers added in past 10 years: Nashville Public Library, AA Birch Criminal Justice Center, Schermerhorn Symphony, Viridian Condominium Complex, Music City Center and Hyatt Place Hotel



9. Questions and Answers

10. Adjourn